Appl. No. 09/545,529

that said marker is carried with said first signal during the processing which said first signal is to experience.

- 2. (Amended) The method of determination of the timing of a first video type signal relative to its associated audio type signal after said audio type and video type signals have been processed, said method including the steps of:
  - a) identifying the occurrence of a particular event in said audio type signal;
  - b) in response to said occurrence of a), marking the image of said video type signal with a marker such that said marking is carried with said video type signal for said processing which said video type signal is to experience;
  - c) identifying the occurrence of the same said particular event of a) in the processed version of said audio type signal;
  - d) detecting said marking of said video type signal of step b) in the processed version of said video type signal;
  - e) comparing the time at which said particular event is again identified in step
    c) to the time of said marking of said processed version of said video type
    signal being detected of step d) to determine the relative timing
    therebetween.
- 3. (Amended) A relative delay measurement system for measuring the relative delay between a plurality of signals which experience unequal delays due to processing thereof, said plurality of signals including a first signal having timing and non-timing portions and a second signal, said system including:
  - a) a marker generator responsive to said second signal to generate a marker upon the occurrence of particular characteristics of said second signal;
  - a marker associator responsive to said marker of a) and said first signal for marking said non-timing portions of said first signal with said marker in a fashion such that said marker will be carried with said first signal but not adversely affected by said subsequent processing;



- a marker separator responsive to said first signal after said subsequent processing to detect the presence of said marker therein and in response thereto generate a first delayed marker;
- d) a marker generator, which may be the same marker generator as in a),
  responsive to said second signal after said subsequent processing to generate
  a second delayed marker;
- e) a relative timing comparison responsive to said first delayed marker and said second delayed marker to determine the relative timing therebetween.
- 8. (Amended) In a television system where a video signal and at least one audio signal are transmitted or stored in compressed form, the method of determination the timing of said video signal relative to said audio signal after said video and audio signals have been compressed and subsequently decompressed, said method including the steps of:
  - a) identifying the occurrence of a particular event in said audio signal prior to compression;
  - b) in response to said occurrence of a), marking the image area of said video signal with a marker;
  - c) identifying the occurrence of the same said particular event of a) in the decompressed version of said audio signal;
  - d) detecting the presence of said marker in the decompressed version of said video signal;
  - e) comparing the time at which said particular event is again identified in step
    c) to the time of detecting the presence of said marker of step d) to
    determine the relative timing therebetween.
- Claim 16. (Amended) A method of determining the synchronization of a video like signal carrying an image\_and at least one corresponding ancillary signal, which signals may suffer differing relative delays to become delayed ancillary and delayed video like signals, said method including the steps of:
  - a) developing a marker in response to said ancillary signal;



- . 110. 09/343,329
  - b) associating said marker with said image of said video like signal;
  - c) recovering said marker from said delayed video like signal;
- d) developing a second marker corresponding to said marker of c) from said delayed ancillary signal;
- e) determining said synchronization in response to comparison of the timing of said marker of c) relative to the timing of said second marker.

Claim 17. (Amended) A method of maintaining the synchronization of a video like signal carrying an image and at least one corresponding ancillary signal which may suffer differing relative delays due to processing thereof which results in delayed ancillary and delayed video like signals, said method including the steps of:

- a) developing a marker in response to said ancillary signal;
- b) associating said marker with said image of said\_video like signal;
- c) recovering said marker from said delayed video like signal;
- d) developing a second marker corresponding to said marker of c) from said delayed ancillary signal;
- e) in response to the timing of said marker of c) relative to the timing of said second marker, delaying the least delayed of said delayed ancillary and said delayed video like signals thereby correcting errors in said synchronization.

Claim 18. (Amended) A method of indicating the relative delay of a video like signal carrying an image and at least one corresponding ancillary signals which may suffer differing relative delays as a result of processing to become delayed ancillary and delayed video like signals, said method including the steps of:

- a) developing a marker in response to said ancillary signal:
- b) associating said marker with said image of said video like signal;
- c) recovering said marker in response to said delayed video like signal;
- d) developing a second marker corresponding to said marker of c) from said delayed ancillary signal;



e) indicating said relative delay in response to comparison of the timing of said marker of c) relative to the timing of said second marker.

Claim 28. (Amended) A method of indicating the synchronization of the video and at least one corresponding audio portion of a television program, which video and audio may suffer differing relative delays due to transmitting or storing said television program, said method including the steps of:

- a) before said transmitting or storing, developing a digital marker signal in response to said audio;
- b) carrying said marker with the image portion of said video in said transmitting or storing;
- c) after said transmitting or storing, recovering said marker from the resulting delayed video:
- d) after said transmitting or storing, in response to the resulting delayed audio developing a second marker corresponding to said marker of c);
- e) indicating said synchronization in response to comparison of the relative timing of said marker of c) and said second marker.

Claim 29. (Amended) A method of maintaining the synchronization of the video and at least one corresponding audio portion of a transmitted or stored television program, which video and audio may suffer differing relative delays as part of said transmitting or storing, said method including the steps of:

- a) before said transmitting or storing, providing a marker in digital form in response to said audio;
- b) carrying said marker with the image portion of said video as part of said transmitting or storing;
- c) after said transmitting or storing, recovering said marker from the resulting delayed video;
- d) after said transmitting or storing, in response to the resulting delayed audio, developing a second marker corresponding to said marker of c):

